

## CONTENT AND DISPLAY DEVICE DEPENDENT CREATION OF SMALLER REPRESENTATIONS OF IMAGES

### RELATED APPLICATIONS

*[4] 27/05*

**[0001]** This application is related to the co-pending application entitled *Header-Based Processing Of Images Compressed Using Multi-Scale Transforms*, concurrently filed on January 10, 2002, U.S. Patent Application Serial No. 10/044,420 assigned to the corporate assignee of the present invention.

### FIELD OF THE INVENTION

**[0002]** The invention relates generally to the field of image processing. More specifically, the invention relates to creating a smaller representation of an image.

### BACKGROUND OF THE INVENTION

**[0003]** Thumbnails are an extremely desirable graphical user interface component for most multimedia and document applications. A thumbnail is a resized smaller version of an image representative of the full image which can be displayed in some applications by clicking on the thumbnail. The resizing is typically done by traditional smoothing followed by downsampling. In most traditional applications, such as listings on a web page, the size of a thumbnail is fixed. A common problem with those thumbnail displays is that the image information is often not recognizable for the viewer and does not provide the desired usefulness.

**[0004]** Newer multimedia communication tools allow a free-format composition of images of various sources on a representative canvas. In this case, the size of a